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U.S. Application No. 10/631,980

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## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

- 1. (Currently Amended) A resorbable adhesion-inhibition membrane for inhibiting adhesions and scarring eomprisingconsisting essentially of a substantially uniform composition of a polymeric material, the polymeric material being capable of resorbing into a mammalian body within a period less than about 24 months from an initial implantation of the adhesion-inhibition membrane into the mammalian body, the polymeric material having a biased molecular orientation in the membrane that is biased to at least one axis and having an anti-inflammatory characteristic with a viscosity property greater than about 1 g/dL, the anti-inflammatory characteristic eomprisingconsisting essentially of a first substantially-smooth non-porous surface, and the membrane having an opposing second surface and a thickness of about 0.001 mm to about 0.300 mm as measured between the first substantially-smooth non-porous surface and the opposing second surface.
- (Previously Presented) The membrane of claim 1, wherein the polymeric material comprises a substantially amorphous polymer.
- (Previously Presented) The membrane of claim 1 wherein the polymeric material comprises a
  polylactide.
- (Previously Presented) The membrane of claim 3 wherein the polylactide comprises a copolymer of L-lactide and D,L-lactide.

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 (Previously Presented) The membrane of claim 1 wherein the polymeric material comprises a conolymer of lactide and ensilon caprolactone.

- (Previously Presented) The membrane of claim 1 wherein the molecular orientation of a
  polymer of the polymeric material is biased toward one axis.
- (Previously Presented) The membrane of claim 1 wherein the molecular orientation of a
  polymer of the polymeric material is biased toward two axes.
- (Previously Presented) The membrane of claim 1 being about 0.010 mm to about 0.100 mm
- 9. (Previously Presented) The membrane of claim 1 being about 0.015 mm to about 0.025 mm thick
- 10. (Previously Presented) The membrane of claim 1 being about 0.020 mm thick.
- 11. (Previously Presented) The membrane of claim 1 wherein the membrane has a glass transition temperature, and a thickness of the membrane increases by at least 5 times when the membrane is brought to its glass transition temperature.
- 12. (Previously Presented) The membrane of claim 1 wherein the membrane has a glass transition temperature, and a thickness of the membrane increases by at least 10 times when the membrane is brought to its glass transition temperature.

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13. (Previously Presented) The membrane of claim 1 being impregnated with an additive selected from the group consisting of a chemotactic substance for influencing cell-migration, an inhibitory substance for influencing cell-migration, a mitogenic growth factor for influencing cell proliferation and a growth factor for influencing cell differentiation.

- 14. (Previously Presented) The membrane of claim 1 being contained in a sealed sterile packaging.
- 15. (Previously Presented) The membrane of claim 1 further having at least one thick portion, each thick portion has a length equal to or shorter than the longest length of the membrane, a width greater than about 0.5 mm, and a thickness greater than about 2 times a thickness of a central area of the membrane.
- 16. (Previously Presented) The membrane of claim 15 wherein the thick portion protrudes from both of the two surfaces and forms at least a segment of an edge of the membrane.
- 17. (Original) The membrane of claim 15 wherein a first thick portion forms at least a segment of a first edge of the membrane, and a second thick portion forms at least a segment of a second edge of the membrane.
- 18. (Original) The membrane of claim 15 wherein a thickness of the membrane increases more than 2 times when the membrane is brought to its glass transition temperature
- 19. (Original) The membrane of claim 17 further comprising a plurality of holes disposed along the thick portion.
- 20. (Previously Presented) The membrane of claim 1 further comprising a plurality of holes disposed along an edge of the membrane.

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 (Previously Presented) The membrane of claim 1 having a viscosity property greater than about 2 g/dL.

- 22. (Previously Presented) The membrane of claim 1 having a viscosity property of about 3 g/dL.
- 23. (Previously Presented) The membrane of claim 1 having a non-uniform shrinking characteristic
- 24. (Previously Presented) The membrane of claim 1 having a directional shrinking characteristic
- 25. (Currently Amended) A resorbable adhesion-inhibition membrane for inhibiting adhesions and scarring, eomprising consisting essentially of a substantially uniform composition of a polymeric material extruded into a membrane, the adhesion-inhibition membrane being capable of resorbing into a mammalian body within a period less than about 24 months from an initial implantation of the membrane into the mammalian body, the membrane having an anti-inflammatory characteristic with a viscosity property greater than about 1 g/dL, the anti-inflammatory characteristic eomprising consisting essentially of a substantially-smooth anti-inflammatory surface and the membrane being about 0.010 mm to about 0.030 mm thick as measured between the substantially-smooth anti-inflammatory surface and a second opposing surface of the membrane.
- 26. (Previously Presented) The membrane of claim 25, wherein the polymeric material comprises a substantially amorphous polymer.

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27. (Original) The membrane of claim 25 further comprising at least one thick portion, the at

least one thick portion having a length equal to or shorter than a longest length of the membrane,

a width greater than about 0.5 mm, and a thickness greater than about 2 times the thickness of

the membrane at a region other than the at least one thick portion.

28. (Previously Presented) The membrane of claim 27 wherein the thick portion protrudes from

both of the two surfaces and forms at least a segment of an edge of the membrane.

29. (Original) The membrane of claim 27 wherein a first thick portion forms at least a segment

of a first edge of the membrane, and a second thick portion forms at least a segment of a second

edge of the membrane.

30. (Original) The membrane of claim 27 wherein the thick portion is effective to provide

rigidity to the membrane.

31. (Original) The membrane of claim 27 further comprising a plurality of holes disposed along

the thick portion.

32. (Original) The membrane of claim 25 wherein the membrane is non-porous and comprises

polylactide.

33-52. Cancelled.

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- 53. (Currently Amended) A resorbable anti-adhesive membrane eomprising essentially of a substantially uniform composition of a polymeric material, the polymeric material being capable of resorbing into a mammalian body within a period less than about 24 months from an initial implantation of the anti-adhesive membrane into the mammalian body, the polymeric material eomprisingconsisting essentially of a polylactide and having a biased molecular orientation in the membrane that is biased to at least one axis and a viscosity property that is greater than about 1 g/dL, the membrane having at least one substantially-smooth-anti-adhesive surface and being non-porous, the membrane also having a thickness of about 0.001 mm to about 0.300 mm as measured between the substantially-smooth anti-adhesive surface and an opposing surface of the membrane, wherein the membrane has a glass transition temperature and a thickness of the membrane increases by at least 5 times when the membrane is brought to its glass transition temperature.
- 54. (Currently Amended) A resorbable anti-adhesive membrane emprisingconsisting essentially of a substantially uniform composition of a polymeric material capable of resorbing into a mammalian body within a period less than about 24 months from an initial implantation of the anti-adhesive membrane into the mammalian body, the polymeric material emprisingconsisting essentially of a polylactide and having a biased molecular orientation in the membrane that is biased to at least one axis and a viscosity property that is greater than about 1 g/dL, the membrane having at least one substantially-smooth anti-adhesive surface and being non-porous, the membrane further having a thickness of about 0.001 mm to about 0.300 mm as measured between the substantially-smooth anti-adhesive surface and an opposing surface of the membrane, wherein the membrane has a glass transition temperature and a thickness of the membrane increases by at least 10 times when the membrane is brought to its glass transition temperature.

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55. (Currently Amended) A resorbable anti-adhesive membrane emprisingconsisting essentially of a substantially uniform composition of a polymeric material capable of resorbing into a mammalian body within a period less than about 24 months from an initial implantation of the anti-adhesive membrane into the mammalian body, the polymeric material emprisingconsisting essentially of a polylactide and having a biased molecular orientation in the membrane that is biased to at least one axis and a viscosity property that is greater than about 1 g/dL, the membrane having at least one substantially-smooth anti-adhesive surface and the membrane being non-porous, the membrane also having a thickness of about 0.001 mm to about 0.300 mm as measured between the substantially-smooth anti-adhesive surface and an opposing surface of the membrane, the membrane further having at least one thick portion, each thick portion having a length equal to or shorter than the longest length of the membrane, a width greater than about 0.5 mm, and a thickness greater than about 2 times a thickness of a central area of the membrane, wherein a thickness of the membrane increases more than 2 times when the membrane is brought to its glass transition temperature.